

# INNOVATION CONNECTION

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U.S. Department of Transportation  
Federal Highway Administration

Sharing Success Stories from the  
Turner-Fairbank Highway Research Center  
[www.tfhrcc.gov](http://www.tfhrcc.gov)

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## The Award Goes to...

Temporarily trading in bridge research for black tie for an evening, TFHRC's Glenn Washer received the Arthur S. Flemming Award for Applied Sciences at a June 5 dinner and ceremony at George Washington University. The award honors young men and women with 3 to 15 years of government experience who have made extraordinary contributions to public service. Glenn's award recognizes his work in launching Turner-Fairbanks' Nondestructive Evaluation Validation Center (NEVC), which develops and tests nondestructive evaluation technologies (NDE) for inspecting bridges. NDE technologies allow the internal condition of structures and pavements to be quickly and accurately analyzed with the least possible disruption to traffic. Major projects of the Center have included a comprehensive study examining the reliability of bridge inspection techniques.

Congratulations, Glenn, on this outstanding achievement.

[To learn more about the work of the NEVC, visit the Center's Website at [www.tfhrcc.gov/hnr20/nde/home.htm](http://www.tfhrcc.gov/hnr20/nde/home.htm).]

### Two for the Road

It may look like your average tractor/trailer. But to researchers at Turner-Fairbank's National Crash Analysis Center, it's a one-of-a-kind model they're developing to evaluate the safety performance of roadside hardware features. As a first step, the tractor/trailer was disassembled and all parts were weighed and material properties catalogued. Geometrical information on all the parts is now being digitized and stored in AutoCAD computer files. The computer model will then be validated on both a component level and by running a full frontal impact test with rigid barriers. Ultimately, researchers will use this model to test multiple impact scenarios, including frontal, frontal offset, oblique, and side impacts with roadside hardware. [Leonard Meczowski, 202-493-3317]

### Teach the Children Well

Doctor, firefighter, astronaut...engineer? Office of Operations R&D Research Engineer Deborah Curtis recently visited two elementary schools in Prince George's County, Maryland, to talk to

students about the profession. At both District Heights Elementary School and Concord Elementary School, students learned that engineering has applications that reach into each of their lives and that it is both a practical and attainable career for them. [Deborah Curtis, 202-493-3267]

### Traffic Control with a Twist

The Lone Star State meets sunny California in an ambitious new undertaking in traffic operations. The Office of RD&T has embarked on a partnership with the cities of Los Angeles and Houston, the State of Texas, the French Ministry of Transportation (INRETS), the Houston Metropolitan Planning Organization, and Harris County, Texas, to implement three new software packages. Both Houston and Los Angeles will adopt two Federally-developed programs, Traffic Estimation and Prediction System (TrEPS) and the RHODES traffic adaptive control software, as well as CLAIRE, a software program developed by INRETS that can analyze traffic control systems and produce strategies for mitigating congestion.

Houston will use the combination of software to help alleviate traffic problems caused by the reconstruction of I-10 and to provide warning and rerouting information in the case of flooding. Los Angeles expects to use the software to predict traffic conditions and develop congestion mitigation strategies.

[Raj Ghaman, 202-493-3270]

## Let Your Fingers Do the Walking

Coming soon to a computer near you...the TFHRC's Technical Reference Center (TRC). Turner-Fairbank is joining forces with the U.S. DOT Library and the Bureau of Transportation Statistics' National Transportation Library to upgrade the TRC into a full-service specialty library. Under the plan, the TRC will become the branch of the DOT library responsible for highway research and technology materials. As a specialty branch, the TRC will be able to offer more library services, including online access to the entire collection, interlibrary loans, more extensive library searches, and reference assistance.

[Zac Ellis, 202-493-3193]

## Revving Up the Pooled Fund Process

What does the future hold? A new and improved pooled fund process, for starters. FHWA is working with AASHTO, TRB, and other partners on re-engineering the Transportation Pooled Fund Program to improve communications and streamline processes. Revving the engine of this tune-up will be a new Web site that will include online solicitation of partners, general study information, progress reports, and final results reports. The re-engineered program also includes an option for States to obtain assistance from FHWA or TRB in administering individual studies.

[Bill Zaccagnino, 202-493-3183]

## Software That Really Moves

Traffic simulation will never be the same. Now available is the newly updated Traffic Software Integrated System (TSIS) Version 5.0. TSIS is a collection of software tools for use by traffic engineers and planners, including a CORridor SIMulation model (CORSIM) that can simulate networks containing both surface streets and freeways. TSIS also includes TRAFED, which is a new product that allows users to easily create and edit traffic databases. The software is available from the McTrans Center at the University of

Florida, 352-392-0378 (fax: 352-392-3224; email: [mctrans@ce.ufl.edu](mailto:mctrans@ce.ufl.edu); Web: [mctrans.ce.ufl.edu/](http://mctrans.ce.ufl.edu/)), and PC-TRANS at the University of Kansas, 785-864-5655 (Web: [www.kutc.ku.edu/pctrans](http://www.kutc.ku.edu/pctrans)). Information on the software is also available on FHWA's TSIS Website ([www.fhwa-tsis.com](http://www.fhwa-tsis.com)). [Raj Ghaman, 202-493-3270]

## Building a Bridge to Japan

TFHRC has a new international flavor with the addition of Research Fellow Kotaro Kato of Japan's Ministry of Land, Infrastructure, and Transport. His stay at Turner-Fairbank will aid in the exchange of information on and coordination of U.S. and Japanese ITS field efforts. Mr. Kato's work will include advancing the U.S.-Japan ITS Joint Research Program and coordinating the U.S.-Japan Workshop on Advanced Technology in Highway Engineering.

[Bob Kelly, 202-493-3469]

### People and Places

#### *Meet Your Resource Director*

Now helping to keep TFHRC running smoothly is new Office of Resource Management Director

**Doreen McCarthy**. Doreen comes to FHWA by way of the Federal Communications Commission. Welcome, Doreen!

#### *A Turner-Fairbank Summer*

There are some new faces in RD&T. Say hello to **Monica Dillard**, **Lindsay Kruger**, and **Casey Covington**, who are all participants in the Summer Transportation Internship Program for Diverse Groups. Monica is a student at Alabama A&M and is working with Marci Kenney in the Office of Program Development and Evaluation. University of Wisconsin, Superior, student Lindsay has also joined the Office of Program Development. Casey, meanwhile, hails from Louisiana Tech and is assisting Bill Kenis as part of the Infrastructure Inspection and Management Team.

#### *Movin' On Out*

After dedicated service as the Publishing Coordinator in the Office of RD&T, **Jon Schans** has forsaken the wide open spaces of Turner-Fairbank for the downtown corridors of the Nassif Building. Jon is now working as a Transportation Specialist in the Office of Policy.